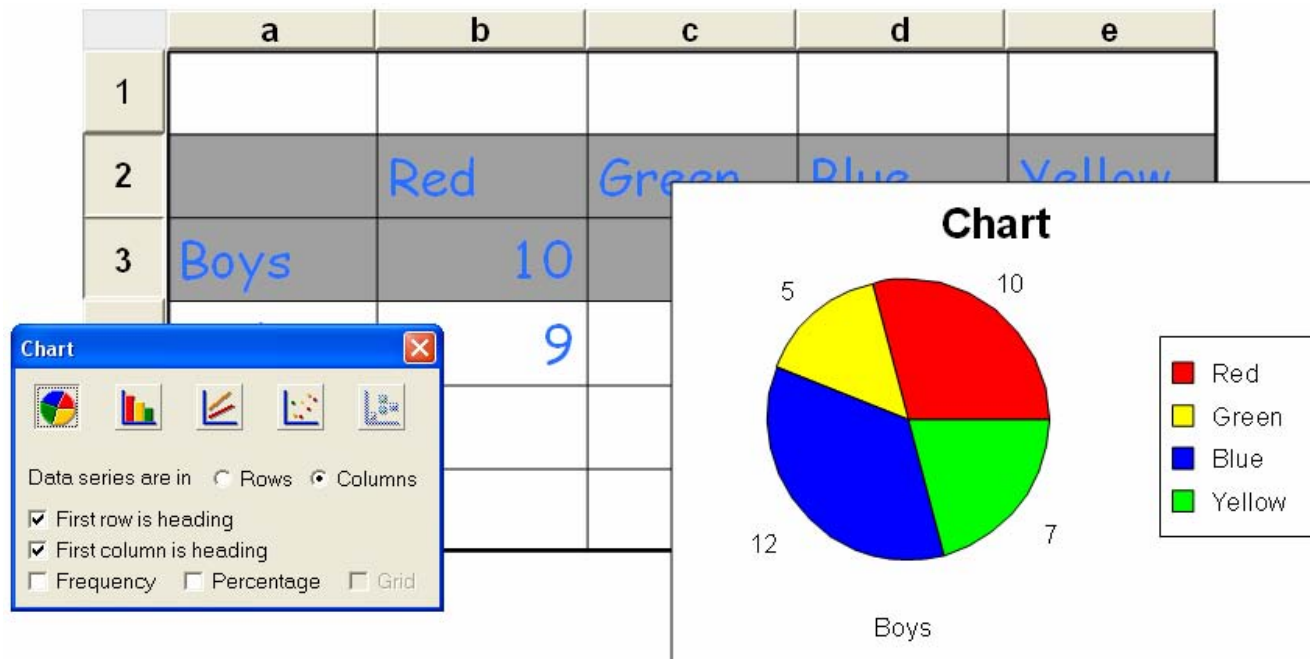


# RM Easiteach



**Spreadsheet Guide**

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# Introduction

Spreadsheet is a simple yet powerful spreadsheet program suitable for all ages and skill levels.

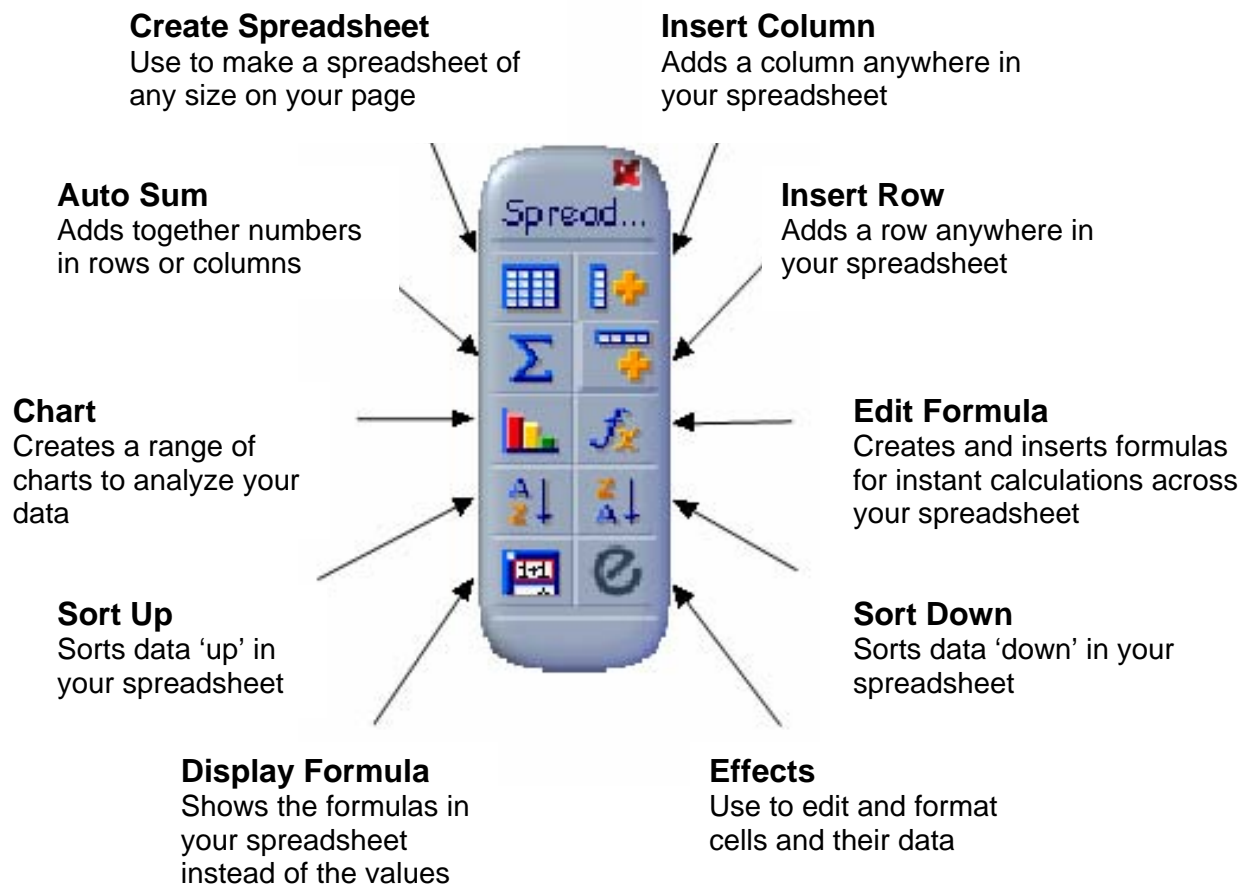
## What is RM Easiteach Spreadsheet?

RM Easiteach Spreadsheet is a powerful spreadsheet tool that is easy to understand and use. It encourages I.T. skills across all skill levels in an engaging and productive way. With Spreadsheet's simple interface, calculations and charting are fun and easy to create and change.

RM Easiteach Spreadsheet's many features include:

- The ability to display a number of small spreadsheets on a single page
- Graphing tools for pie charts, bar charts, line charts, and scatter graphs
- An easy-to-use formula window for creating and entering calculations
- A variety of numerical formats – decimal, per cent, currency, and more

## The Spreadsheet Toolbar



## Reviewing the License Agreement

If you wish to review your License Agreement while you are running RM Easiteach:

1. Click **File > About RM Easiteach**.
2. Select **License Agreement**.

## Using Spreadsheet

### Starting Spreadsheet

To run Spreadsheet, select **Toolbars** from the bottom of the RM Easiteach screen and click **Spreadsheet**. The Spreadsheet toolbar is now visible on the RM Easiteach page.

To see examples of RM Easiteach Spreadsheet, select **File > Open > Examples...** and click **Spreadsheet**.

# Key Features

## Creating a Spreadsheet

1. To create a new spreadsheet, click the **Create Spreadsheet** button on the Spreadsheet toolbar. The pointer changes to a cross.
2. Move the cross to a suitable place on the page and then click and drag diagonally to create your spreadsheet. Dragging downwards makes more rows; dragging horizontally makes more columns.
3. When the spreadsheet reaches the correct size, release the cross.

	a	b	c
1			
2			
3			
4			
5			

	a	b	c	d
1				
2				
3				
4				
5				

The columns and rows have button headers. They are used to select columns or rows, or to select and drag them. The headers on the columns are labeled with letters and the rows with numbers. Used together, the letters and numbers form a grid reference for locating cells in the spreadsheet – for example a1, c3.



## Entering Data

You can enter data by simply clicking in the cells and typing the data, or by using Edit Formula (see 'Using Formulas' on p. 38). You can also insert images in the cells.

### Typing Data into a Cell

Text and numbers can be typed directly into a cell. If you are working on a whiteboard, select **Hide/Show Keyboard** at the foot of the RM Easiteach page for an on-screen keyboard.

1. Click inside a cell. The cell now contains a red line or 'caret'.
2. Type the data in the cell and then click inside another cell, or out of the spreadsheet, to enter the data.

	a	b	c	d
1				
2		+		
3				
4				
5				

	a	b	c	d
1				
2		mouse		
3				
4				
5				

## Inserting Images

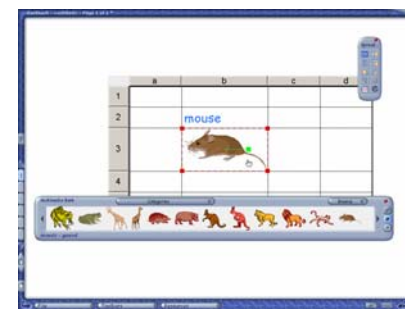
You can insert images and photos in the cells to make your spreadsheets more exciting.

1. Go to **Resources** at the bottom of the screen and select **Multimedia Bank** to open the Multimedia Bank window.

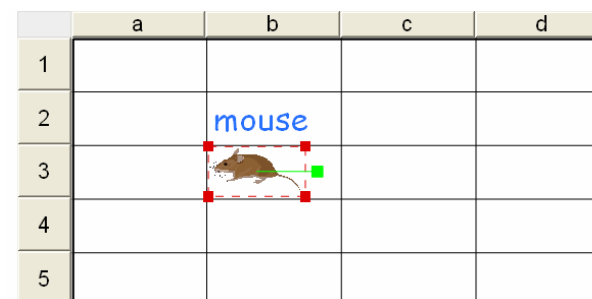
You can select RM Easiteach images from the Multimedia Bank or navigate to other picture resources through this window.



2. Select the image and drag it into the cell.





3. You can resize the image by dragging on the red selection points.



## Editing Data


To edit data in a cell, click in front of the letter or number to be changed or removed and press **Delete** on the keyboard. You can now type a new letter or number in its place if required.

	a	b	c	d
1				
2		mousse		
3				
4				
5				

	a	b	c	d
1				
2		mouse		
3				
4				
5				

## Deleting Data

- To delete data in a cell, select the **Delete** tool from the Easiteach toolbar and then click on the data that you want to delete. It will be removed from the cell.
- To delete an image, use the **Delete** tool again in the same way.

	a	b	c	d
1				
2		mouse		
3				
4				
5				



## Inserting a Column

You can insert a column anywhere in your spreadsheet.

1. Click the column header to the left of the point where you want to insert the new column. This selects the column and activates the **Insert Column** button on the toolbar.
2. Click the **Insert Column** button. The new column appears in your spreadsheet.

	a	b	c	d
1				
2				
3				
4				
5				

	a	b	c	d	e
1				New	
2					
3					
4					
5					



## Inserting a Row

You can insert a row anywhere in your spreadsheet.

1. Click the row number above the point where you wish to add a new row. This selects the row and activates the **Insert Row** button on the toolbar.

	a	b	c	d	e
1					
2					
3					
4					
5					

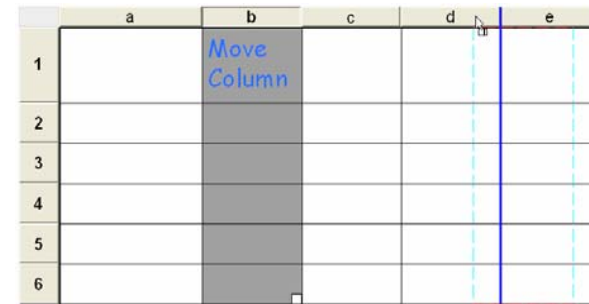
2. Click the **Insert Row** button. The new row appears in your spreadsheet.

	a	b	c	d	e
1					
2					
3					
4					
5	New Row				
6					

## Moving a Column or Row

You can move a column or row to a new location in your spreadsheet.

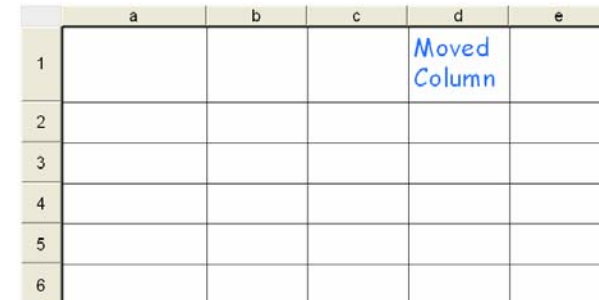
1. Click the column or row header to select it.



A screenshot of a spreadsheet with columns labeled a through e and rows numbered 1 through 6. Column b is highlighted in grey. The text "Move Column" is written in blue inside cell b1. A blue vertical line is positioned between columns d and e, indicating the insertion point. A mouse cursor is visible at the top of column d.

	a	b	c	d	e
1		Move Column			
2					
3					
4					
5					
6					

2. Now click and drag the column or row to the required location. A blue line indicates the insertion point.

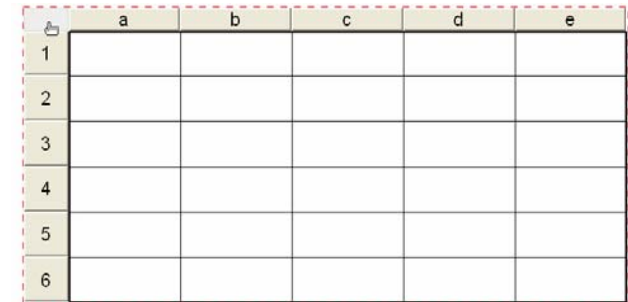


A screenshot of a spreadsheet showing the result of moving column b to column d. The columns are now labeled a, b, c, d, and e. Column d is highlighted in grey and contains the text "Moved Column" in blue in cell d1. The original column b is now empty.

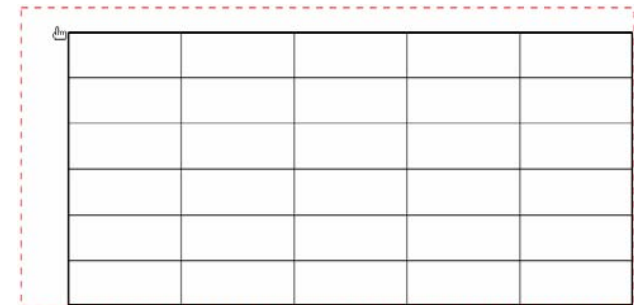
	a	b	c	d	e
1				Moved Column	
2					
3					
4					
5					
6					

## Moving your Spreadsheet on the Page

1. To reposition your spreadsheet on the page, click the gray left-hand corner of the spreadsheet. A red dotted line appears around the spreadsheet and the pointer changes to a hand.
2. You can now click and drag the corner to move the spreadsheet.
3. If the headers are turned off, you can select the spreadsheet by clicking just outside the top left-hand corner of the spreadsheet grid. The pointer changes to a hand. You can now move the spreadsheet by dragging the corner between the dotted red selection lines and the grid.



	a	b	c	d	e
1					
2					
3					
4					
5					
6					




For information about turning headers on and off, see 'Turning off the Column and Row Headers' on p. 52.

## Changing the Size of a Column or Row

It is simple to change the size of individual columns or rows.

1. Hold the pointer over the right edge of the column or bottom line of the row until the sizing arrows appear.
2. Now click and drag the column or row to the desired size. Red dotted lines appear around the line that is being moved.

	a	b	c	d	e
1					
2					
3					
4					
5					
6					

	a	b	c	d	e
1					
2					
3					
4					
5					
6					

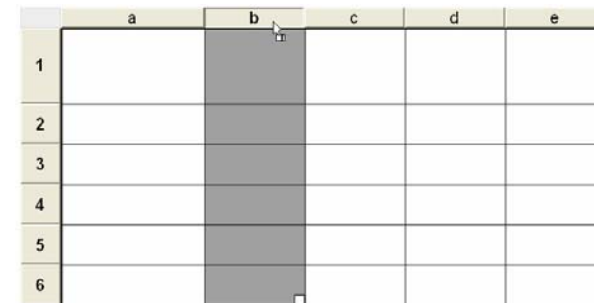


## Deleting Columns and Rows

To delete a column or row, click on the column or row header to select it and press **Delete** on your keyboard. You can also drag a column or row by its header to the Garbage can at the bottom of the screen. However, if you drag a column or row to the Garbage it cannot be recovered.

You can delete more than one column or row at a time if they are adjacent:

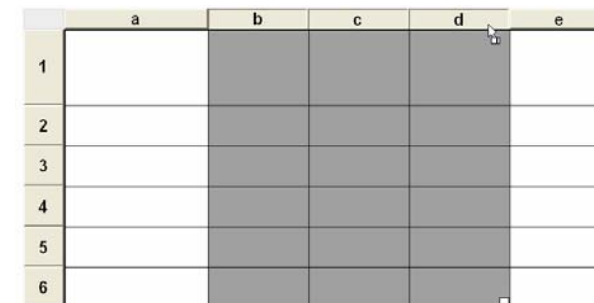
1. Click and drag the first column or row header and then continue dragging along the headers to select them.



A screenshot of a spreadsheet with 5 columns labeled 'a' through 'e' and 6 rows labeled '1' through '6'. Column 'b' is highlighted in grey, indicating it is selected for deletion. A mouse cursor is visible over the header of column 'b'.

	a	b	c	d	e
1					
2					
3					
4					
5					
6					

2. The columns can now be deleted together.



A screenshot of a spreadsheet with 5 columns labeled 'a' through 'e' and 6 rows labeled '1' through '6'. Columns 'b', 'c', and 'd' are highlighted in grey, indicating they are selected for deletion. A mouse cursor is visible over the header of column 'd'.

	a	b	c	d	e
1					
2					
3					
4					
5					
6					

## Laying out a Spreadsheet

The best way to demonstrate some of the features of RM Easiteach Spreadsheet is to use some real data in a small spreadsheet.

In the Favorite Colors example, the students have conducted a survey of their favorite colors. You can use RM Easiteach Spreadsheet to display and analyze the survey. To create the spreadsheet yourself:

1. Type the row and column headings. You may need to adjust the column widths so that headings stay in one row. See 'Changing the Size of a Column or Row' on p. 12 for instructions.
2. Enter the data against the headings, and adjust the columns again if necessary.

	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys				
4	Girls				
5					
6					

	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys	6	7	12	5
4	Girls	9	9	10	3
5					
6					

## Selecting Cells, Columns, and Rows

When you create formulas or charts, or when you edit or format cells, you need to be able to select cells individually or as a group.

### Selecting Cells

1. To select a single cell, simply click and drag inside the cell.
2. If you want to select more than one cell, click and drag inside the first cell and then continue to drag across or down to include more cells.

	a	b	c	d	e
1					
2					
3					
4					
5					
6					

	a	b	c	d	e
1					
2					
3					
4					
5					
6					

### Selecting Columns and Rows

1. To select a single column or row, click the column or row header.

	a	b	c	d	e
1					
2					
3					
4					
5					
6					

You can select more than one column or row at a time if they are adjacent:

2. Select the first column or row header and then right-click on the last column or row to be included. These columns and all the columns between them are now selected.

	a	b	c	d	e
1					
2					
3					
4					
5					
6					

## Selecting Separated Cells, Columns, and Rows

You may need to select data in cells, columns or rows that are separated in your spreadsheet.

The following examples use a Favorite Colors spreadsheet (see 'Laying out a Spreadsheet' on p. 14). To practise with a ready-made example, go to **File > Open > Examples...** and choose **Spreadsheet**.

1. If you are working with a keyboard, you can select separated columns or rows easily. Click the header of the first column or row to select it. Then press and hold down **Ctrl** on the keyboard while you click the rest of your selection.

	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys	6	7	12	5
4	Girls	9	9	10	3
5					
6					

- If you are working on a whiteboard or you need to select separated cells, you must move the columns or rows so that they lie adjacent. (See 'Moving a Column or Row' on p. 10.)

In the example, the girl's data in Row 4 is moved next to the column headings in Row 2. The data in these rows can now be selected together.

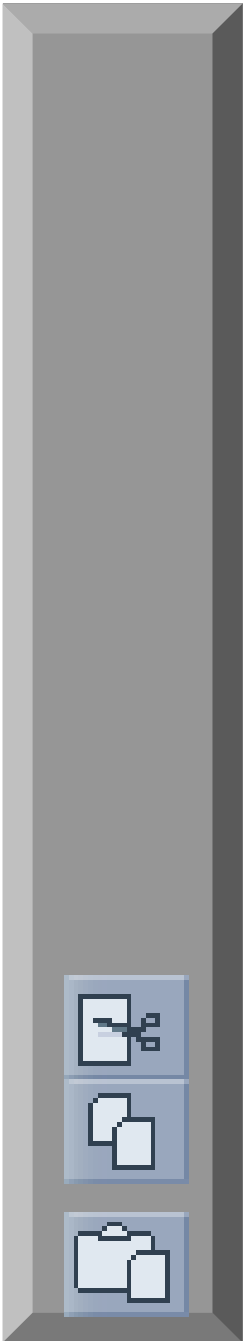
	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys	6	7	12	5
4	Girls	9	9	10	3
5					
6					

	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Girls	9	9	10	3
4	Boys	6	7	12	5
5					
6					

## Using Cut, Copy, and Paste

You can cut, copy, and paste data from one cell to another using the Easiteach toolbar.

- Click inside the cell and drag across the data to select it. This activates the **Cut** and **Copy** buttons on the Easiteach toolbar.
- Press **Cut** or **Copy** as required.
- Click inside the cell receiving the data, and press **Paste**.



## Creating Sub-Sheets and Dividing a Spreadsheet

A sub-sheet is an extract from the main spreadsheet – the main spreadsheet stays intact. Sub-sheets are useful if you want to focus on particular parts of a large spreadsheet and make the data more manageable on a single page. You can create any number of sub-sheets and display them on the same page as the main spreadsheet or copy them to a new page.

You can also divide the main spreadsheet permanently into smaller spreadsheets.

To create a sub-sheet or divide a spreadsheet, the columns and rows must lie adjacent so that they can be selected together. See 'Moving a Column or Row' on p. 10 for instructions on relocating separated columns or rows.

The following examples use the Favorite Colors spreadsheet (see 'Laying out a Spreadsheet' on p. 14). To practise with a ready-made example, go to **File > Open > Examples...** and choose **Spreadsheet**.

### Producing a Sub-Sheet

1. Open the Easiteach toolbar and select **Edit Mode**.
2. Click the arrow at the bottom of the Easiteach toolbar to display the **Copy** and **Paste** buttons.





3. Select the cells, columns or rows for the sub-sheet and click the **Copy** button on the Easiteach toolbar.



4. Click the page outside the main spreadsheet. This activates the **Paste** button on the Easiteach toolbar. Press **Paste** to place the sub-sheet on the page.

	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys	6	7	12	5
4	Girls	9	9	10	3
5					
6					

S1	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys	6	7	12	5
4	Girls	9	9	10	3
5					
6					

S2	a	b	c	d	e
1		Red	Yellow	Blue	Green
2	Boys	6	7	12	5

3. If you want to place the sub-sheet on a new page, copy the cells, rows or columns as before, but select **New Page** from the side of the screen.
4. Click the new page and paste the sub-sheet.

## Dividing a Spreadsheet

You can break up a large spreadsheet into smaller more manageable spreadsheets. Be careful, as once separated, a spreadsheet cannot be rebuilt.

1. Select the rows or columns that you want to separate.

	a	b	c	d	e
1					
2		Red	Green	Blue	Yellow
3	Boys	6	5	12	7
4	Girls	9	3	10	9
5					
6					

2. Click on one of the headers, and drag the selection out of the spreadsheet. The selection is indicated by a blue dotted line as it is dragged.

	a	b	c	d	e
1					
2		Red	Green	Blue	Yellow
3	Boys	6	5	12	7
4	Girls	9	3	10	9
5					
6					

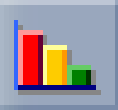
3. Release the new spreadsheet onto the page.

You can now add new rows and columns to the separated spreadsheet. See 'Inserting a Column' on p. 8, 'Inserting a Row' on p. 9.

S1	a	b	c
1			
2		Red	Green
3	Boys	6	5
4	Girls	9	3
5			
6			

S2	a	b
1		
2	Blue	Yellow
3	12	7
4	10	9
5		
6		





## Charting Data

Once you have created a spreadsheet, you can display its data using a variety of charts. RM Easiteach Spreadsheet contains bar chart, line chart, pie chart, and scatter graph formats.

The examples here use a Favorite Colors spreadsheet (see 'Laying out a Spreadsheet' on p. 14) and a Height and Age spreadsheet. If you want to practise with ready-made spreadsheets, go to **File > Open > Examples...** and choose **Spreadsheet**.

### Creating a Chart

The Chart button on the Spreadsheet toolbar is activated when you select cells in your spreadsheet.

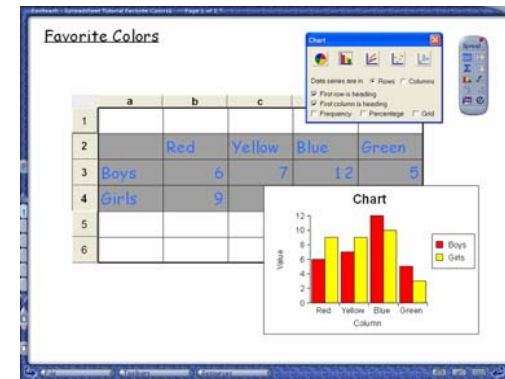
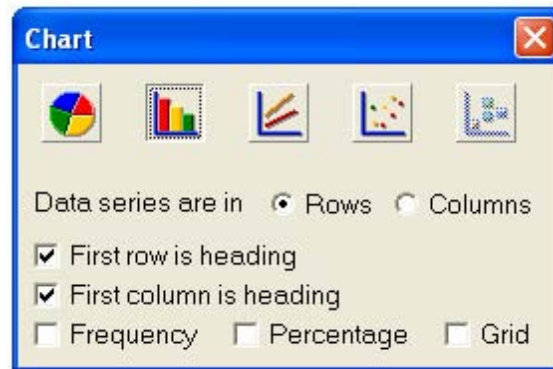
1. Open the Favorite Colors spreadsheet if you want to work through the examples.

	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys	6	7	12	5
4	Girls	9	9	10	3
5					
6					

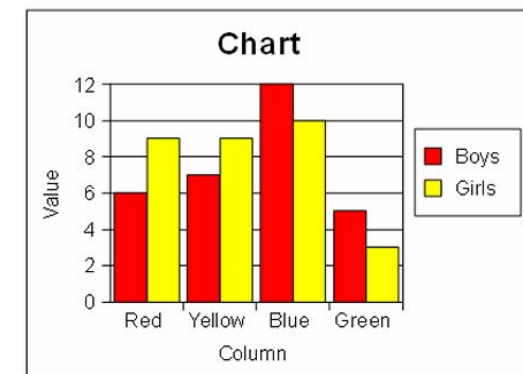
2. Select the cells you want to chart – in the example it is all the cells in rows 2, 3, and 4 (see 'Selecting Cells' on p. 15). You need to be in Edit Mode to select cells.

	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys	6	7	12	5
4	Girls	9	9	10	3
5					
6					

3. Select the **Chart** button to open the Chart palette. Clicking a chart type activates the rest of the palette and displays your data selection in that chart's format. You can click between the charts and options to display your data in different ways.



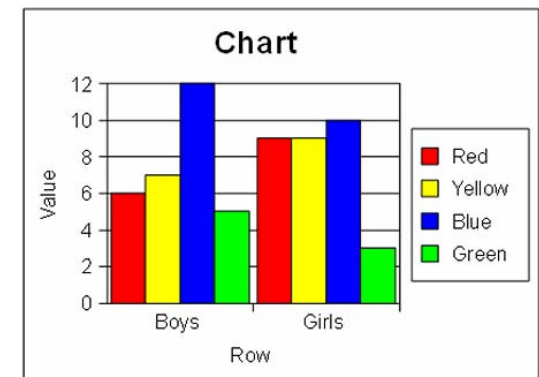
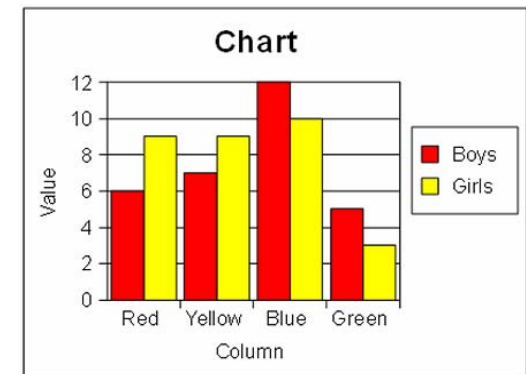
4. If you want a background grid on your chart, select the Grid option. Grids provide useful reference points for reading heights and values in a graph.



## Choosing the Axes

The x-axis (horizontal axis) shown on a bar chart, line chart and scatter graph depends on whether you have selected the data series in columns or rows. The palette opens with the data series in rows by default.

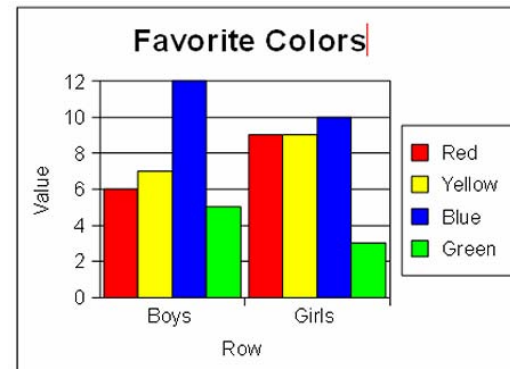
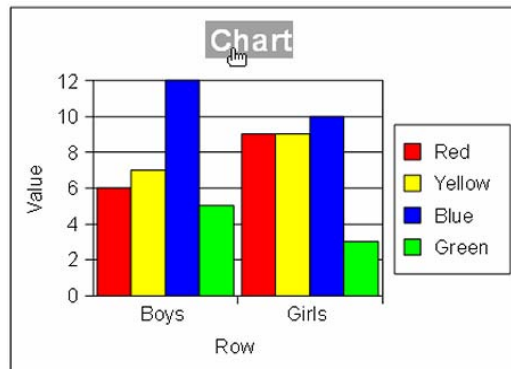
1. Select **Bar Chart** from the Chart palette.
2. A bar chart with the data series in **Rows** has the column headings as the x-axis. The data in the rows is being charted against the column headings.
3. Select the **Columns** option. The row headings now form the x-axis. The data in the columns is being charted against the row headings.



## Editing Text on the Chart

You can change the title and rename the axes on your charts.

1. Open the Easiteach toolbar and click **Edit Mode**.
2. Select the text and retype it.

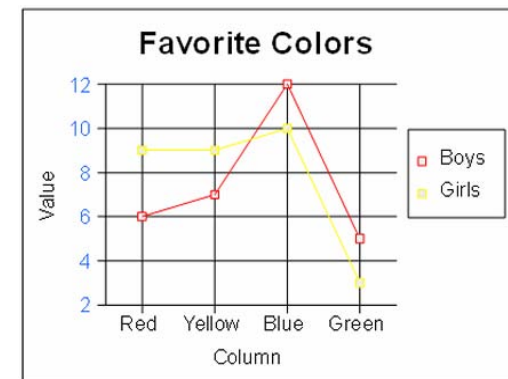
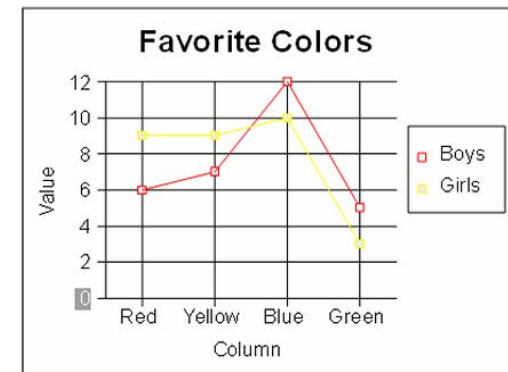
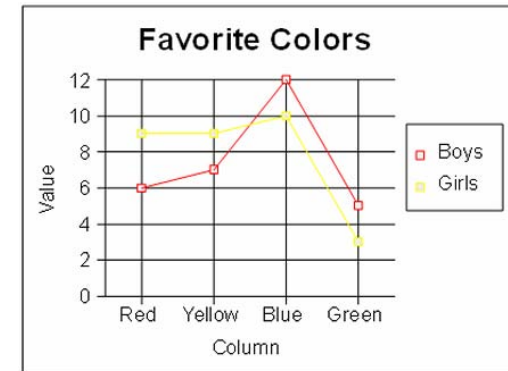


## Changing the Scale of Values

You can change the values of a bar chart, line chart or scatter graph to make the results more readable or centered in the chart.



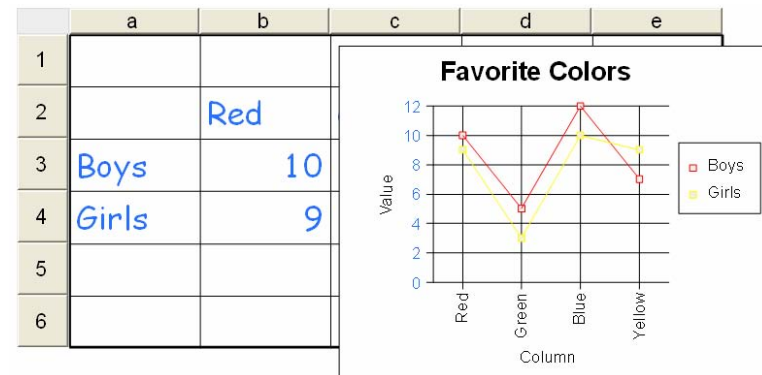
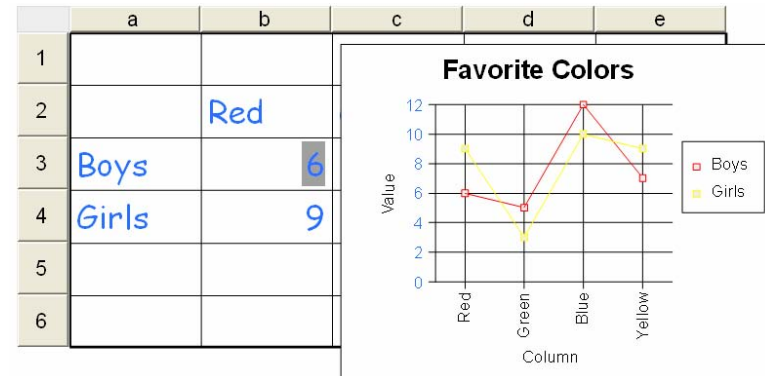
1. Using the Favorite Colors example, select **Line Chart** on the Chart palette and then the data series in **Rows** option.
2. Open the Easiteach toolbar and select **Edit Mode**.
3. Now select the top or bottom number on the y-axis (vertical axis), and type in a new number. In the example, the 0 on the line graph is changed to 2.
4. Click away from the chart to enter the figure. The chart changes to reflect the new scale.



## Updating the Chart from the Spreadsheet

Changing the data on the spreadsheet updates the chart.

1. Open the Easiteach toolbar and select **Edit Mode**.
2. Click the cell that needs to be changed. In the example, the number in Cell 3b is changed from 6 to 10.
3. Delete the old number and type in the new one.
4. Click out of the cell to insert the number. The chart changes to reflect the new data.



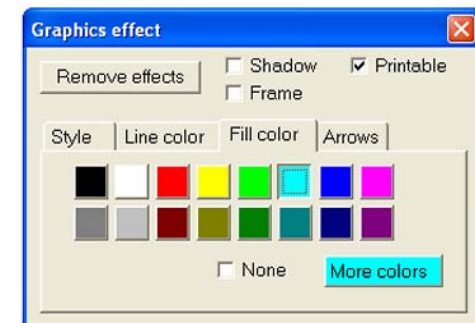
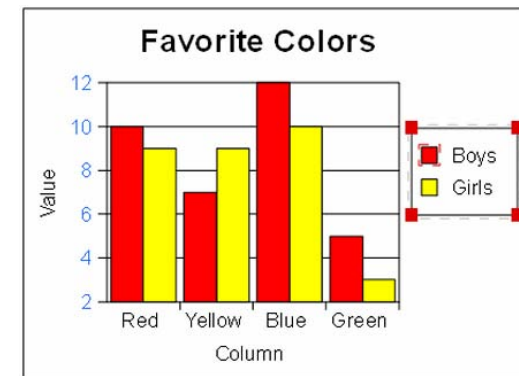
## Changing the Colors and Lines on a Chart

You can change the colors on charts, and the thickness and style of lines on line charts.

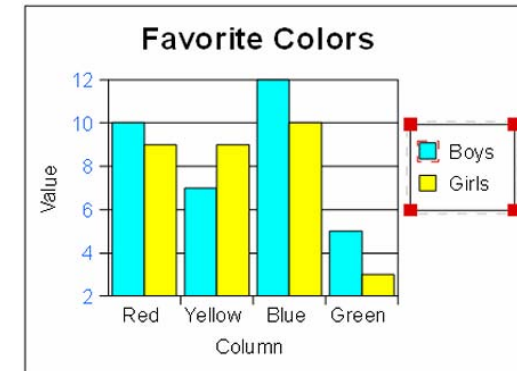
1. Using the Favorite Colors example, select all three rows of data and press **Chart** on the Spreadsheet toolbar.
2. Choose **Bar Chart** on the Chart palette.

### *Changing the Colors*

1. Select **Edit Mode** on the Easiteach toolbar.
2. Click the bar or the colored square in the key to select the color that you want to change. A red dotted line appears around your selection.
3. Select **Effects** on the Spreadsheet toolbar to open the Graphics effect window.

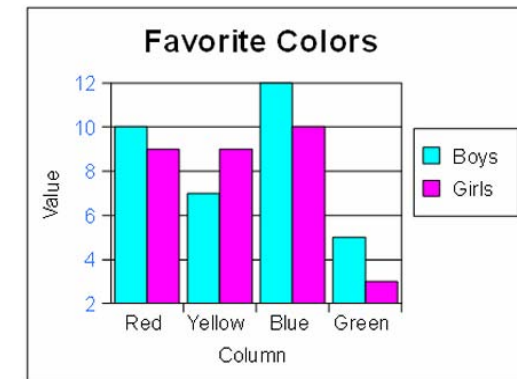


- Click the **Fill color** tab and choose a new color, then click out of the chart to remove the selection points.



- Change other colors using the same process.

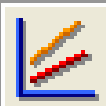
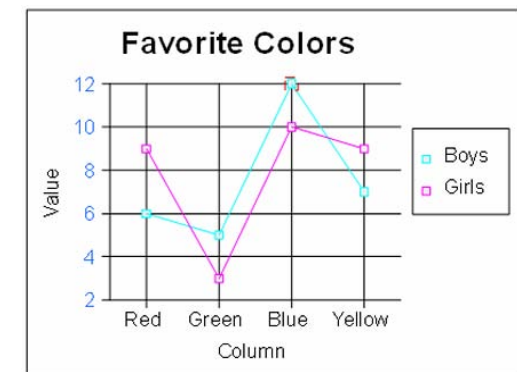
You can also change the background color of the chart in the same way. Click on the background so that the red dotted line appears. Select a different color on the **Fill color** tab on the Graphics effect window.



### *Changing the Lines*

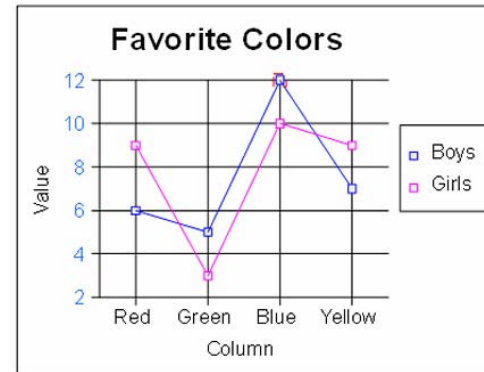
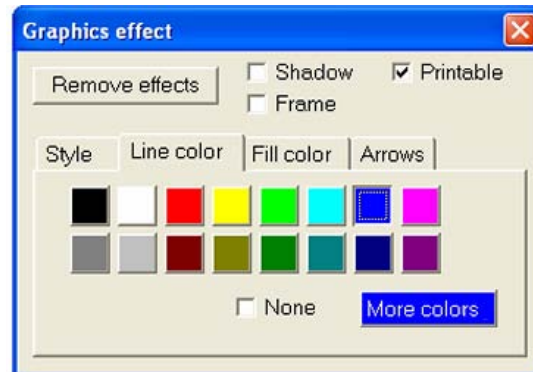
You can change the color, thickness, and style of line on a line chart.

- Select **Line Chart** on the Chart palette.
- To select a line, click its colored square in the key or click one of the charting points.

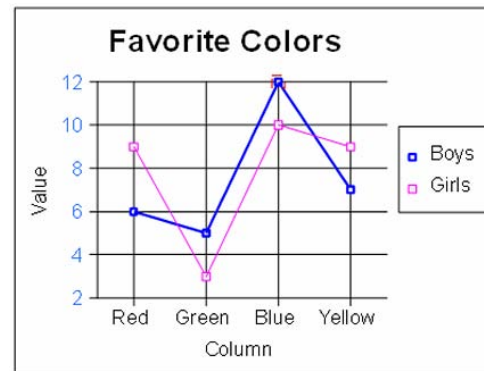
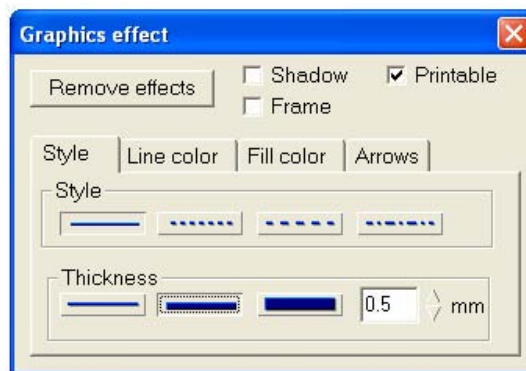




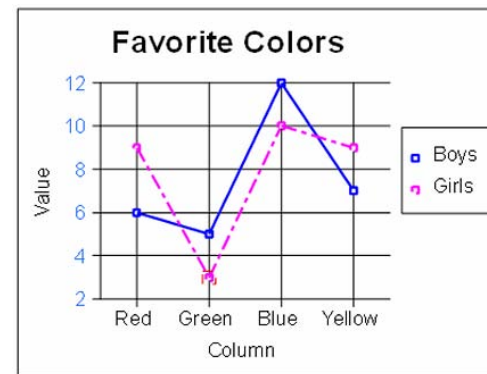
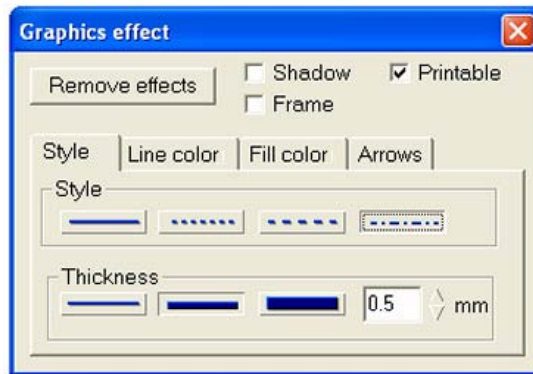
3. Click **Effects** to open the Graphics effect window, and then select the **Line color** tab. Select the dark blue line color. The line color changes immediately.



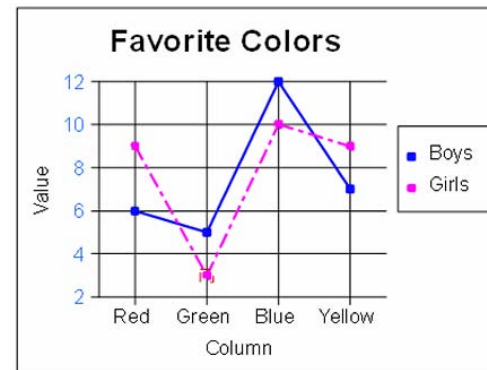
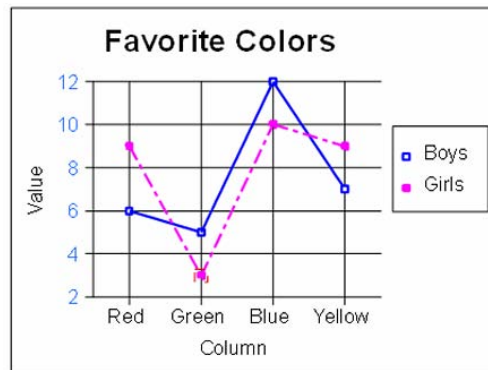
4. To change the width of the line, press the **Style** tab on the Graphics effect window. Go to **Thickness** and change the width of the line. You can click one of the standard line widths or set your own by typing a value or using the arrow buttons.



5. You can choose a broken or dotted line option on the **Style** tab.



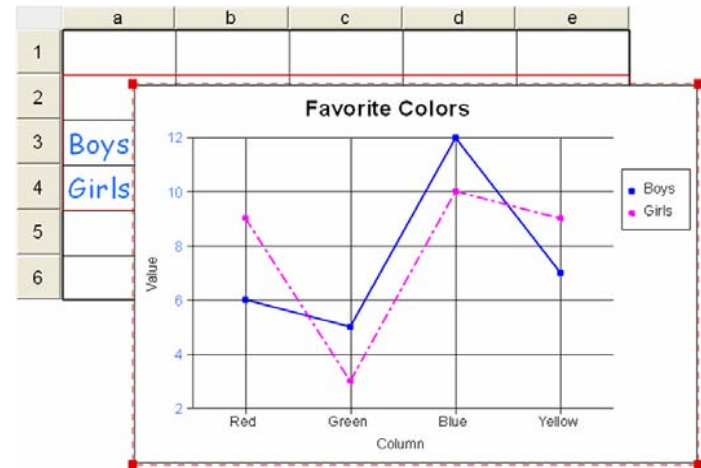
6. To fill in the squares on the line and the key, click one of the squares and select the **Fill color** tab. Click the correct fill color for the square. Repeat for the other line.



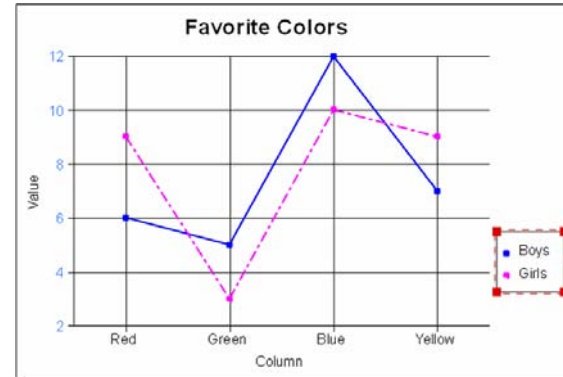
## Resizing Your Chart

1. If you want to resize your chart, click it to select it. The chart can now be resized by dragging the corners. It can also be copied and pasted to a new page.

While the chart is selected, the block of data being used is highlighted with a red line on the spreadsheet.



2. You can also move the key on the chart. Click the key to select it and then drag it to a new position.

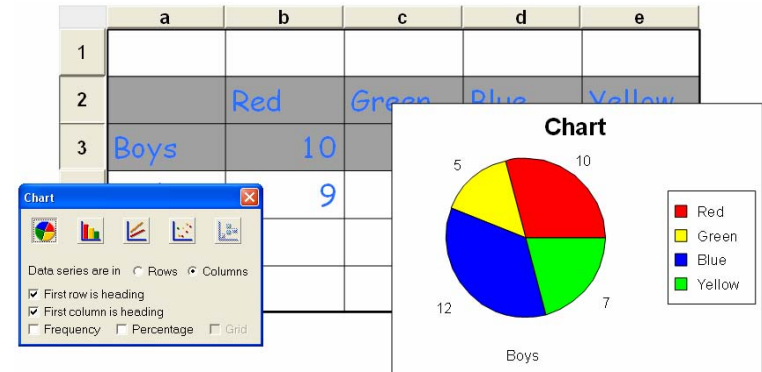




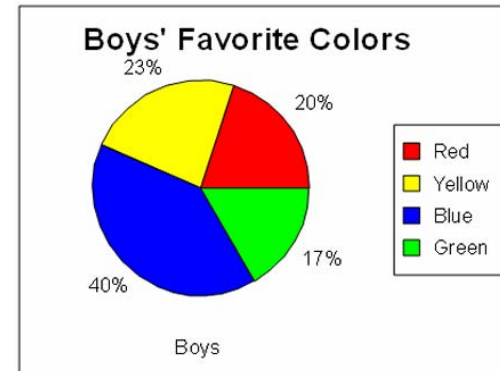
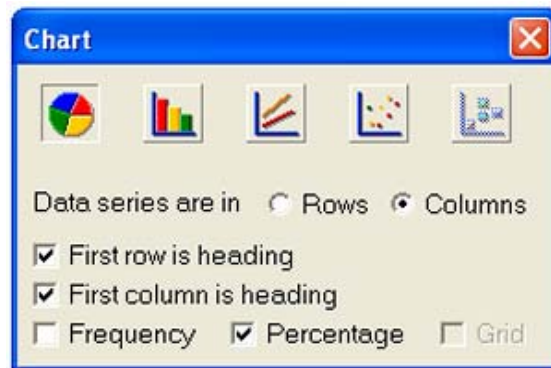
## Creating a Pie Chart

A pie chart shows how a single set of data divides up against a row or column heading. For example, using the Favorite Colors spreadsheet, you can create a pie chart to show the number or percentage of boys who like each color.

1. Select the headings and data. In the Favorite Colors example, these are the colors in Row 2 and the boys' data in Row 3.
2. Click **Chart** on the Spreadsheet toolbar to open the Chart palette. Select the **Pie Chart** button and then the data series in **Columns** option.



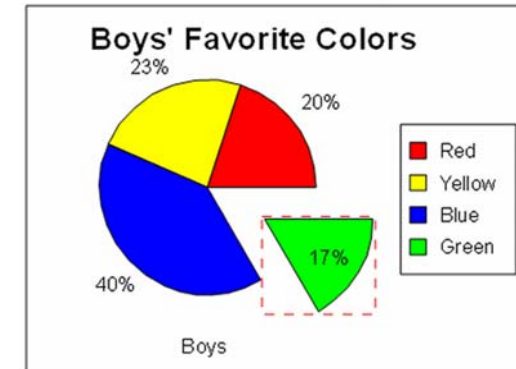
- You can select the **Percentage** option to show the numbers of boys choosing each color as percentages.



### *Exploding a Pie Chart*

Not as messy as it sounds! The segments of a pie chart can be exploded.

- Select **Edit Mode** from the Easiteach toolbar and then click on a segment to select it.
- Click and drag the segment away to a new position.





## Creating a Scatter Graph

Scatter graphs are used to show the relationships between two different data series – for example, age and height.

The following example from a Science lesson uses a survey of age and height measured in centimeters.

You can create the spreadsheet yourself or use a ready-made example - go to **File > Open > Examples...** and choose **Spreadsheet**.

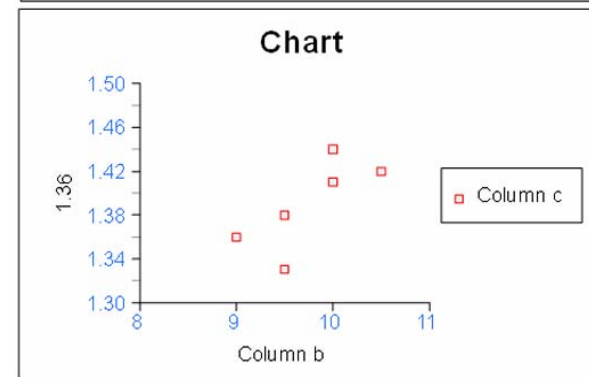
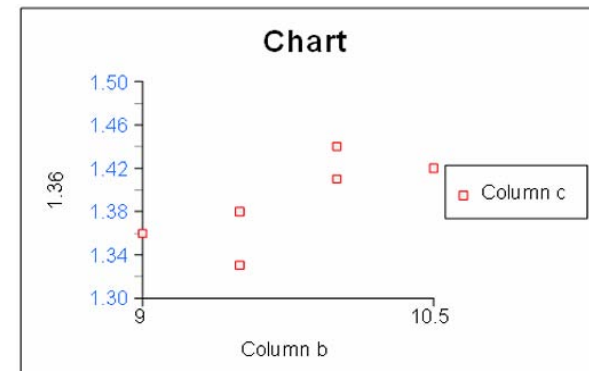
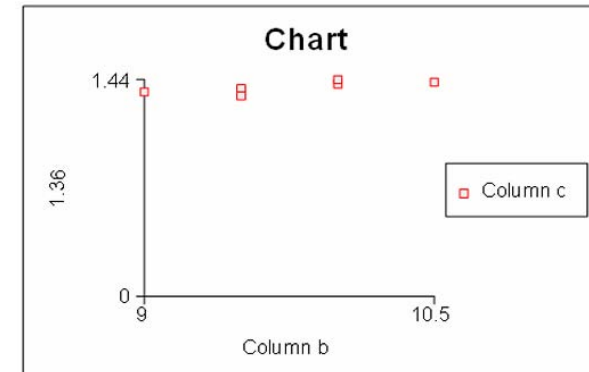
1. Select the cells containing the column headings and data for Age and Height.

	a	b	c
1	Name	Age	Height
2	Raza	9	1.36
3	Mary	10	1.41
4	Stuart	10.5	1.42
5	Alex	10	1.44
6	Louisa	9.5	1.38
7	George	9.5	1.33
8			
9	Mean		
10	Maximum		
11	Minimum		

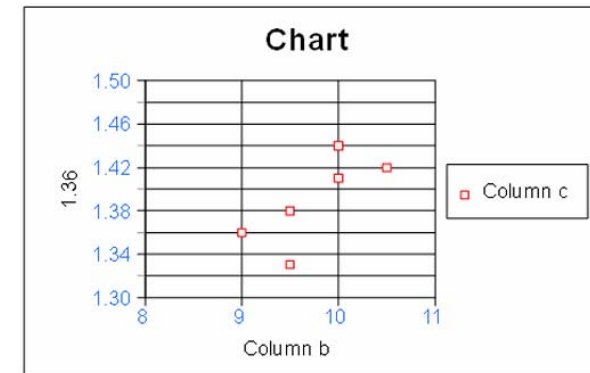
	a	b	c
1	Name	Age	Height
2	Raza	9	1.36
3	Mary	10	1.41
4	Stuart	10.5	1.42
5	Alex	10	1.44
6	Louisa	9.5	1.38
7	George	9.5	1.33
8			
9	Mean		
10	Maximum		
11	Minimum		



2. Click **Chart** on the Spreadsheet toolbar and then **Scatter Graph** on the Chart palette.
3. The points in the example graph are crowded along the top because the y-scale starts at zero. Select the y-axis starting value and change it to 1.3 and then change the end value to 1.5.
4. Click out of the chart to enter the new values.
5. Now change the x-axis starting value to 9 and the end value to 11 to center the points in the chart.



6. Select the chart to activate the Chart palette, and click the **Grid** option. This makes the points easier to read.



The scatter graph now shows the relationship between age and height – height increases with age.

To show trends and anomalies, you can plot a line of best fit using one of the Line tools on the Easiteach toolbar.



## Auto Sum

Auto Sum adds together all the values in the cells you have selected. The sum of the values appears in the cell directly beneath a column of figures, and directly to the right of a row of figures.



To use Auto Sum:

1. Select the cells containing the numbers that you want to add together.
2. Now press the **Auto Sum** button on the Spreadsheet toolbar to enter the sum.
3. You can click in the cell containing the sum to display the equation – in the example, this is sum(b3:b4). The number shown in brackets is the range – all the cells to be added together, from the first to the last inclusive.

If you amend the data in the cells, the sum is instantly recalculated.

	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys	6	7	12	5
4	Girls	9	9	10	3
5					
6					

	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys	6	7	12	5
4	Girls	9	9	10	3
5		15			
6					

	a	b	c	d	e
1					
2		Red	Yellow	Blue	Green
3	Boys	6	7	12	5
4	Girls	9	9	10	3
5		sum(b3:b4)			
6					



## Using Formulas

Using formulas (functions) allows you to create more sophisticated, interactive spreadsheets. When you update the data in the cells, the formula instantly recalculates and displays the results.

Spreadsheet contains formulas for a wide range of equations – from the common = function used in simple adding, subtraction, division, and multiplication, to formulas for working out means and advanced calculations.

The following example uses a survey of age and height again.

You can create the spreadsheet yourself or use a ready-made example - go to **File > Open > Examples...** and choose **Spreadsheet**.

	a	b	c
1	Name	Age	Height
2	Raza	9	1.36
3	Mary	10	1.41
4	Stuart	10.5	1.42
5	Alex	10	1.44
6	Louisa	9.5	1.38
7	George	9.5	1.33
8			
9	Mean		
10	Maximum		
11	Minimum		



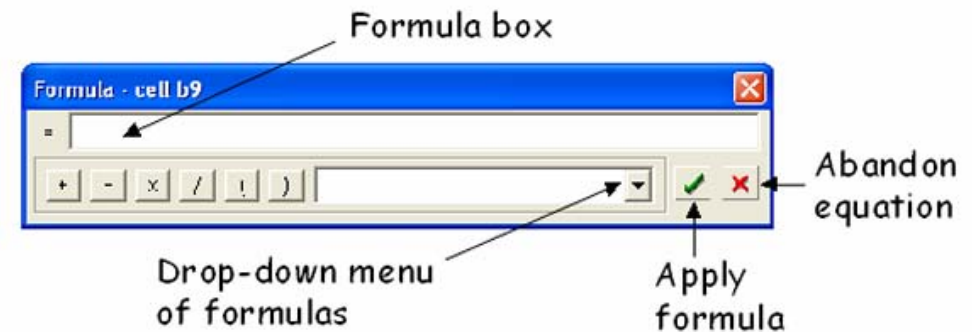
## Entering Formulas

Formulas are entered into cells using the **Edit Formula** function on the Spreadsheet toolbar. The **Edit Formula** button is activated when you select the cell in which the sum is to appear.

### *Finding the Mean*

1. Click inside Cell b9 and then select the **Edit Formula** button on the Spreadsheet toolbar. This opens the Formula window. A blue frame highlights the active cell.

3	Mary	10
4	Stuart	10.5
5	Alex	10
6	Louisa	9.5
7	George	9.5
8		
9		
10	Maximum	
11	Minimum	



- Click the menu arrow and select **mean(range)** from the list of formulas. The formula appears in the Formula box.

	Name	Age	He
1			
2	Raza	9	
3	Mary	10	
4	Stuart	10.5	
5	Alex	10	
6	Louisa	9.5	
7	George	9.5	
10	Maximum		
11	Minimum		

Formula - cell b9

= mean(range)

+ - x / ( ) mean(range) ✓ ✗

- Now select cells **b2** to **b7** inclusive – click and drag in the top cell and continue dragging until all the cells are selected. As you select it, the range appears in the Formula box between the brackets.

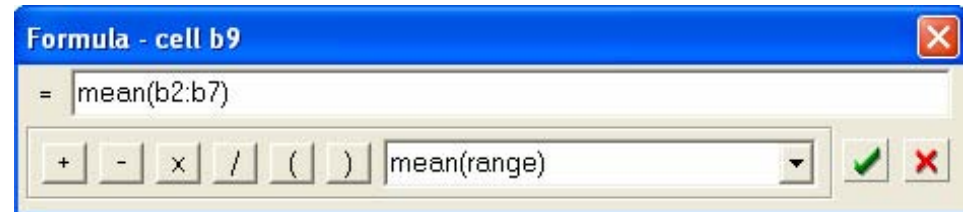
	Name	Age	He
1			
2	Raza	9	
3	Mary	10	
4	Stuart	10.5	
5	Alex	10	
6	Louisa	9.5	
7	George	9.5	
10	Maximum		

Formula - cell b9

= mean(B2:B7)

+ - x / ( ) mean(range) ✓ ✗

4. The complete formula is now in the Formula box. You can also type a formula directly into the Formula box.



5. Check that the correct formula appears in the Formula box. If you have made an error, click the red cross on the Formula window to abandon the equation. You can now select the cells again.
6. Click the green tick on the Formula window to apply the formula. This displays the formula in Cell b9 and closes the Formula window.

6	Louisa	7.5
7	George	9.5
8		
9	Mean	mean(b2:b7)
10	Maximum	

- To enter the formula, click inside another cell or out of the spreadsheet.

### Copying a Formula across Cells

You can apply the same formula to an adjacent column of different data without having to write the formula again.

- Select the cell you want to copy.
- Move your pointer over the white square in the bottom right-hand corner of the cell. The pointer changes to a black cross.

	a	b	c
1	Name	Age	Height
2	Raza	9	1.36
3	Mary	10	1.41
4	Stuart	10.5	1.42
5	Alex	10	1.44
6	Louisa	9.5	1.38
7	George	9.5	1.33
8			
9	Mean	9.75	
10	Maximum		
11	Minimum		

6	Louisa	9.5	1.38
7	George	9.5	1.33
8			
9	Mean	mean(b2:b7)	
10	Maximum		
11	Minimum		

6	Louisa	9.5	1.38
7	George	9.5	1.33
8			
9	Mean	mean(b2:b7)	
10	Maximum		
11	Minimum		

- Click the black cross and then hold and drag the cross into the adjacent cell – Cell c9 in the example. The cell is highlighted with a red frame.

6	Louisa	9.5	1.33
7	George	9.5	1.33
8			
9	Mean	mean(b2:b7)	+
10	Maximum		
11	Minimum		

- Release the black cross to insert the formula into the cell. The sum is displayed immediately.

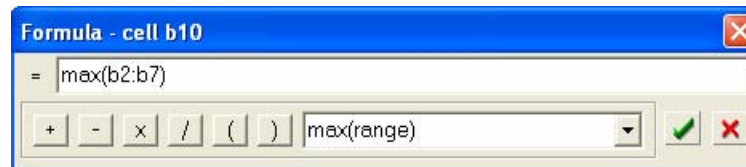
You can copy a formula across any number of cells using this method.

6	Louisa	9.5	1.33
7	George	9.5	1.33
8			
9	Mean	mean(b2:b7)	1.39
10	Maximum		
11	Minimum		

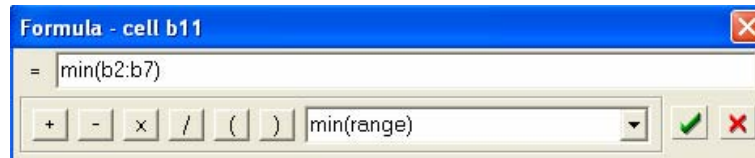
## Finding the Maximum and Minimum Values

Finding the maximum and minimum values in a range is very useful when your spreadsheet contains a lot of numbers in no particular order. In the Age and Height example, the maximum and minimum values identify the oldest, youngest, shortest, and tallest students.

1. Enter the formula following the same steps used to find the Mean.
2. To find the Maximum values, choose the formula **max(range)** from the menu in the Formula window.



3. To find the Minimum values, choose the formula **min(range)** from the menu in the Formula window.



You have now completed the Age and Height survey.

	a	b	c
1	Name	Age	Height
2	Raza	9	1.36
3	Mary	10	1.41
4	Stuart	10.5	1.42
5	Alex	10	1.44
6	Louisa	9.5	1.38
7	George	9.5	1.33
10	Maximum	9.75	1.39
11	Minimum		

	a	b	c
1	Name	Age	Height
2	Raza	9	1.36
3	Mary	10	1.41
4	Stuart	10.5	1.42
5	Alex	10	1.44
6	Louisa	9.5	1.38
7	George	9.5	1.33
8			
9	Mean	9.75	1.39
10	Maximum	10.5	1.44
11	Minimum	9	1.33





## Display Formula

The **Display Formula** function shows all the formulas in a spreadsheet. It is not activated unless the spreadsheet contains at least one formula.

1. Click anywhere on the spreadsheet to activate the **Display Formula** button on the Spreadsheet toolbar.
2. Selecting **Display Formula** shows the formulas in the cells. The spreadsheet expands, so you may need to use the scroll bar to view all the cells.
3. You can edit the formulas by clicking them and retyping the equation. The sums are recalculated instantly.
4. Select **Display Formula** again to display the values.

	a	b	c
1	Name	Age	Height
2	Raza	9	1.36
3	Mary	10	1.41
4	Stuart	10.5	1.42
5	Alex	10	1.44
6	Louisa	9.5	1.38
7	George	9.5	1.33
8			
9	Mean	mean(b2:b7)	mean(c2:c7)
10	Maximum	max(b2:b7)	max(c2:c7)

## Sorting Data Up and Down

You can use the **Sort Up** and **Sort Down** buttons to sort the data in your spreadsheet. Text entries sort alphabetically; figures sort by number size.

1. Select the cells containing the data to be sorted. Then press the appropriate sort button on the Spreadsheet toolbar.
2. In the example, the names are selected and the **Sort Up** button is clicked.

	a	b	c
1	Name	Age	Height
2	Raza	9	1.36
3	Mary	10	1.41
4	Stuart	10.5	1.42
5	Alex	10	1.44
6	Louisa	9.5	1.38
7	George	9.5	1.33

	a	b	c
1	Name	Age	Height
2	Alex	10	1.44
3	George	9.5	1.33
4	Louisa	9.5	1.38
5	Mary	10	1.41
6	Raza	9	1.36
7	Stuart	10.5	1.42

The names in the spreadsheet sort alphabetically, and the data rearranges accordingly.

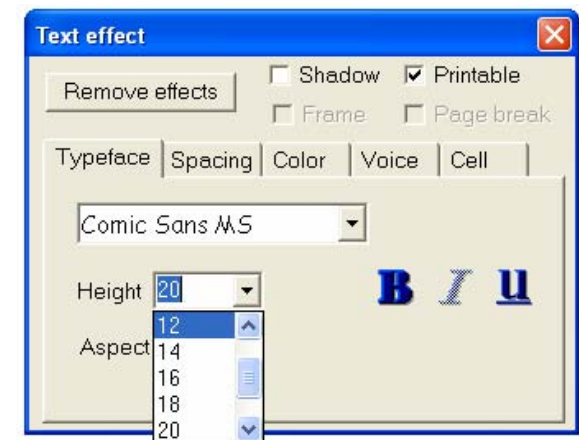
## Editing and Formatting Cells

You can edit or preset the format of the data entered in any cells using the **Effects** function on the Spreadsheet toolbar. For example, you can choose to display height in inches, use currency symbols, or set decimal places. You can also color cells and text, set the justification, and select the typeface style and height.

### Changing the Type Size

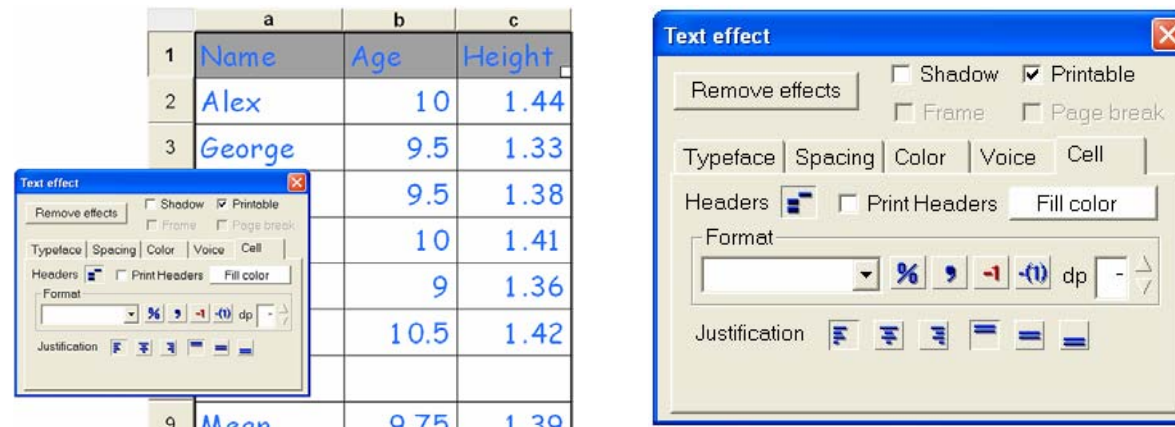
If you are working with a large spreadsheet, you can format the type size used in the cells to make the spreadsheet more manageable on the page.

1. To format the type size throughout a spreadsheet, select all the cells by clicking and dragging from the top left corner to the bottom right.
2. Now click the **Effects** button on the Spreadsheet toolbar to open the Text effect window.
3. Click the arrow in the **Height** window and select a smaller type size from the drop-down list.
4. Click away from the spreadsheet to apply the formatting.

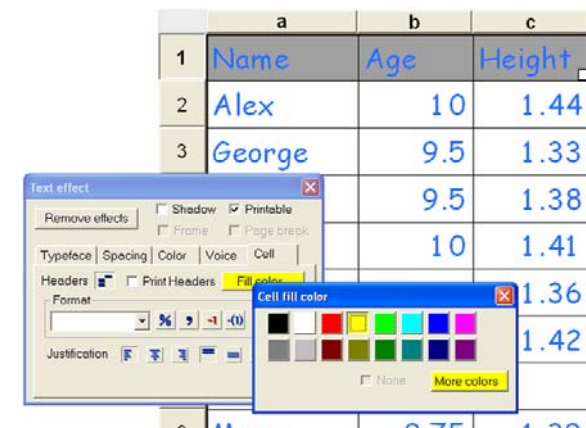


## Adding Color to Cells

1. Select the cells to be colored by clicking and dragging. Click **Effects** to open the Text effect window and then choose the **Cell** tab.



2. Click the **Fill color** bar to open the Cell fill color palette, and select a color.



3. Click away from the spreadsheet to display the colored cells.



	a	b	c
1	Name	Age	Height
2	Alex	10	1.44
3	George	9.5	1.33
		9.5	1.38
		10	1.41
			1.36
			1.42
9	Mean	9.75	1.39

	a	b	c
1	Name	Age	Height
2	Alex	10	1.44
3	George	9.5	1.33
4	Louisa	9.5	1.38
5	Mary	10	1.41
6	Raza	9	1.36
7	Stuart	10.5	1.42
8			
9	Mean	9.75	1.39
10	Maximum	10.5	1.44
11	Minimum	9	1.33

## Setting Decimal Places

A formula sometimes gives the answer to more than two decimal places. For example, if cell b2 on the Age and Height spreadsheet is changed to 9.7, the mean is recalculated to include six decimal places.

You can change the decimal place setting using the **Effects** function. You can select a single cell, groups of cells, columns, or rows to be formatted.

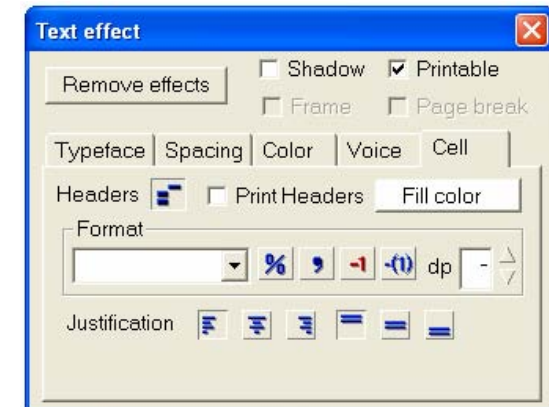
1. Click the column header to select the whole column.
2. Click **Effects** on the Spreadsheet toolbar to open the Text effect window, and then select the **Cell** tab.

	a	b	c
1	Name	Age	Height
2	Alex	10.5	1.44
3	George	9.5	1.33
4	Louisa	9.5	1.38
5	Mary	10	1.41
6	Raza	9	1.36
7	Stuart	10.5	1.42
8			
9	Mean	9.833333	1.39
10	Maximum	10.5	1.44
11	Minimum	9	1.33

3. In the Format section, use the arrows on the **dp** window to set the number of decimal places.

The numbers in the cell change instantly to reflect the new setting.

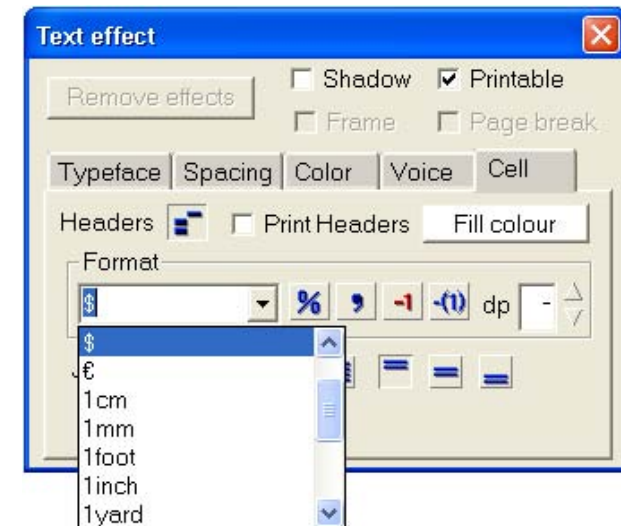
You can preset the format of columns and rows in this way before entering data.



## Inserting Date, Currency, and Unit Formats

To avoid typing units, currency, and other notation used with figures, you can select or create a format for the cells. You can format the cells before or after inserting the numeric data.

1. Select the cells to be formatted, and then click **Effects** to open the Text effect window. Choose the **Cell** tab in the window.
2. Click the arrow in the **Format** box to display a drop-down list of common formats.
3. Select the required format and then click out of the Text effect window.
4. If you want to create your own format, for example lb, simply type it in the **Format** box. The format is applied instantly and added to the drop-down menu for future use. To make the format appear to the right of the value, enter a 1 before it, e.g. 1lb.

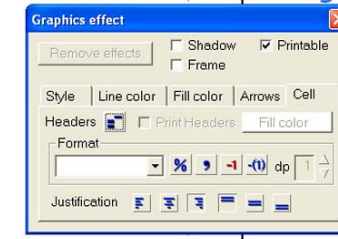


## Turning off the Column and Row Headers

You can display your spreadsheet without the column and row headers.

1. Click the **Effects** button on the Spreadsheet toolbar to open the Graphics effect window, and then select the **Cell** tab.
2. Click the **Headers** button on the Cell tab to turn off the headers.
3. Click the **Headers** button to turn them back on.

You can still select the chart, columns, and rows when the headers are turned off. Click the pointer just outside the grid where the headers are hidden and the gray selection corner are hidden.



Name	Age	Height
Alex	10.0	1.44
George	9.5	1.33
	9.5	1.38
	10.0	1.41
	9.0	1.36
	10.5	1.42
Mean	9.8	1.39
Maximum	10.5	1.44
Minimum	9.0	1.33

Name	Age	Height
Raza	9	1.36
Mary	10	1.41
Stuart	10.5	1.42
Alex	10	1.44
Louisa	9.5	1.38
George	9.5	1.33
Mean	9.8	1.39
Maximum	10.5	1.44
Minimum	9	1.33



## Locking Spreadsheets

You can lock all or part of your spreadsheet to prevent the data being changed in error.

1. Open the Easiteach toolbar and click the down arrow at the bottom of the toolbar to display the **Utilities** button.
2. If you are working on a saved spreadsheet, select **Edit Mode**.
3. To select the whole spreadsheet click on the gray top left corner. To select individual columns or rows, select the column or row header. To select individual or groups of cells, click and drag inside and across the cells.
4. Click the **Utilities** button to open the Utilities toolbar and press **Lock/Unlock to Background**. Your selection is now locked to the page.
5. To access locked spreadsheets or cells, click the **Access Locked Items** button on the Utilities toolbar. The button highlights while the locked items are accessible. You can now edit the spreadsheet.
6. Click the **Access Locked Items** again to relock or click the **Lock/Unlock to Background** button to remove the locking completely.



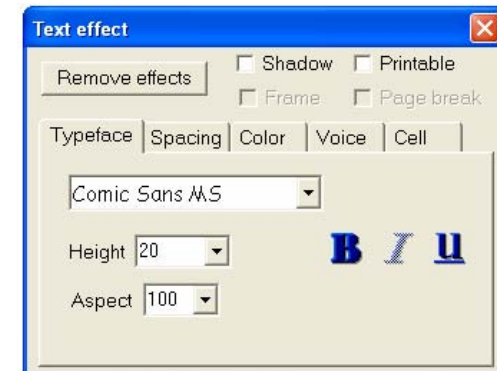
## Printing Spreadsheets

To print a spreadsheet, select **File > Print**. Enter the number of copies required and check that the **Only this page** option is ticked.

## Printing without Column and Row Headers

This option prints without the column and row headers but retains the frame and grid lines.

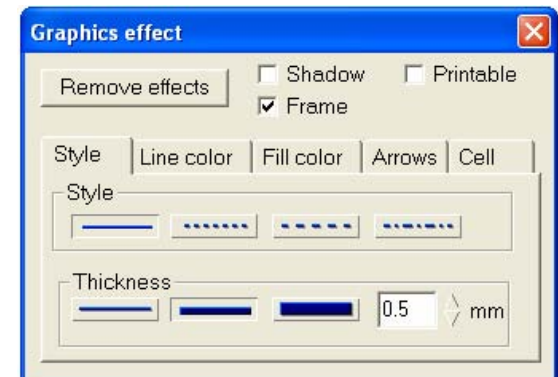
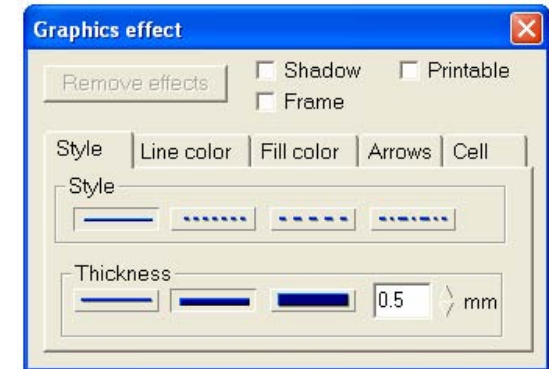
1. Click a cell containing data to activate the **Effects** button on the Easiteach toolbar.
2. Select **Effects** to open the Text effect window and click the **Printable** option box to clear it.



## Printing without Headers and Grid

This option prints only the data in the spreadsheet. You can, however, choose to print the data inside a frame.

1. Click the gray left corner of the spreadsheet to activate the Effects button on the Spreadsheet toolbar.
2. Select **Effects** to open the Graphics effect window and click the **Printable** option box to clear it.
3. If you wish to keep a frame around the data, click the **Frame** option box on the Graphics effect window. The data then prints without grid lines, but inside a frame.



## Importing Spreadsheet Data from other Sources

You can import spreadsheet data from simple Excel spreadsheets and Comma Separated Variable files.

1. Select **File > Open** and browse to the correct folder.
2. In the open dialog, select the **Files of Type** dropdown list and choose Excel workbook or CSV file type. CSV is the recommended file type as not all Excel spreadsheets will import successfully.

## Ideas for Lessons

- You can display and work on a number of small spreadsheets on the RM Easiteach page at any one time.
- A spreadsheet can be saved at any point in its creation - for example, you could create a spreadsheet with column and row headings. You can then either:
  - Print the spreadsheet for data collecting
  - Ask the students to enter the data in the spreadsheet
- Like a grid reference on a map, a cell is identified in a spreadsheet by the combination of the column letter and row number in which it is situated.

Practise locating cells by asking for the data of cells at different references, or name or select the cell data and ask for its reference.

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